

HVM187S

Silicon Epitaxial Planar Pin Diode for High Frequency Attenuator

REJ03G0115-0400Z
(Previous: ADE-208-055C)
Rev.4.00
Oct.08.2003

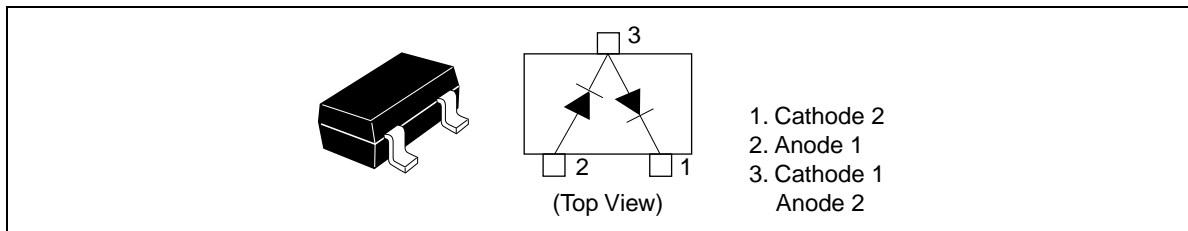
Features

- Low forward resistance. ($r_f = 5.5\Omega$ max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HVM187S | H3 | MPAK |

Pin Arrangement



HVM187S

Absolute Maximum Ratings

(T_a = 25°C)

| Item | Symbol | Value | Unit |
|----------------------|-------------------------------|-------------|------|
| Reverse voltage | V _R | 60 | V |
| Forward current | I _F | 50 | mA |
| Power dissipation | P _d * ¹ | 100 | mW |
| Junction temperature | T _J | 125 | °C |
| Storage temperature | T _{stg} | -55 to +125 | °C |

Note: 1. Per one device.

Electrical Characteristics *¹

(T_a = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-------------------------------|----------------|-----|-----|-----|------|---|
| Reverse current | I _R | — | — | 100 | nA | V _R = 60 V |
| Forward voltage | V _F | — | — | 1.0 | V | I _F = 10 mA |
| Capacitance | C | — | — | 2.4 | pF | V _R = 0 V, f = 1 MHz |
| Forward resistance | r _f | 3.5 | — | 5.5 | Ω | I _F = 10 mA, f = 100 MHz |
| ESD-Capability * ² | — | 200 | — | — | V | C = 200 pF, Both forward and Reverse direction 1 pulse. |

Notes: 1. Per one device.

2. Failure criterion ; I_R ≥ 100 nA at V_R = 60 V

Main Characteristic

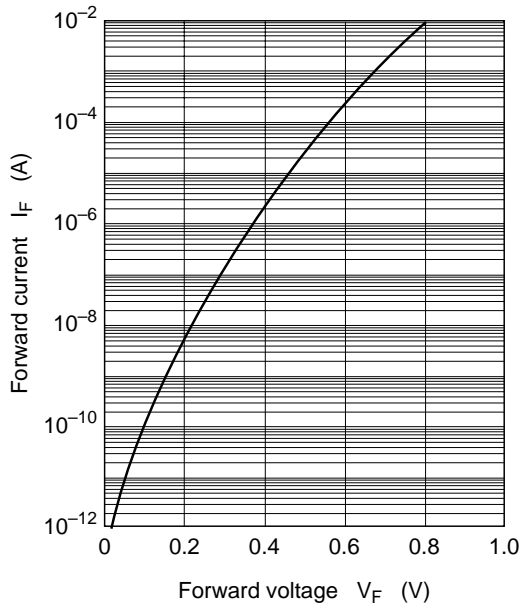


Fig.1 Forward current vs. Forward voltage

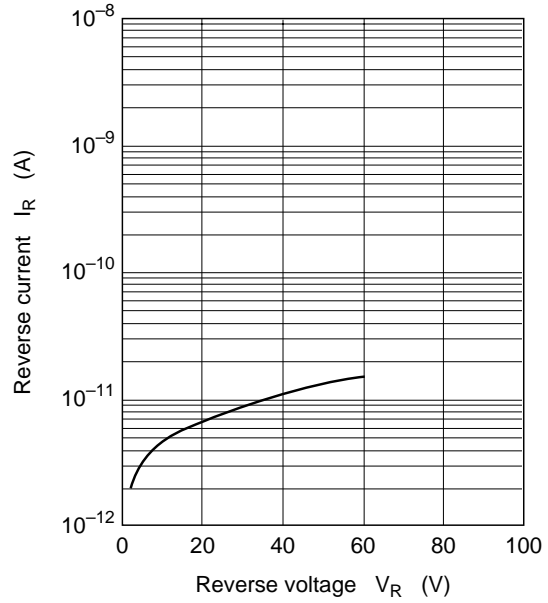


Fig.2 Reverse current vs. Reverse voltage

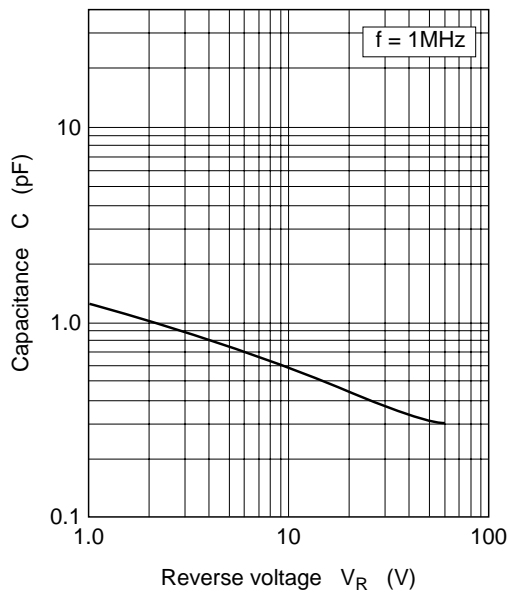


Fig.3 Capacitance vs. Reverse voltage

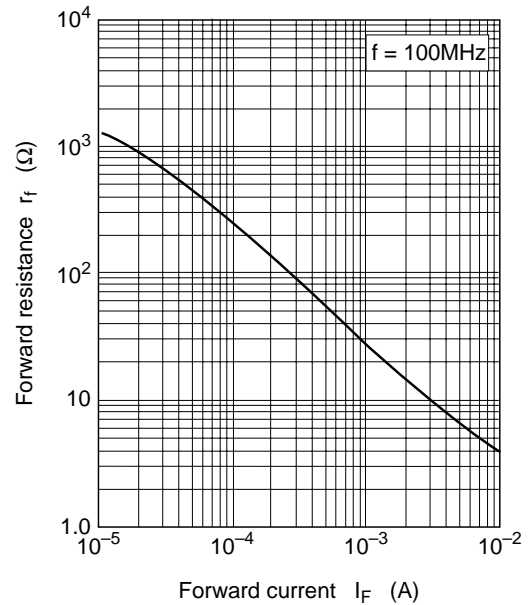
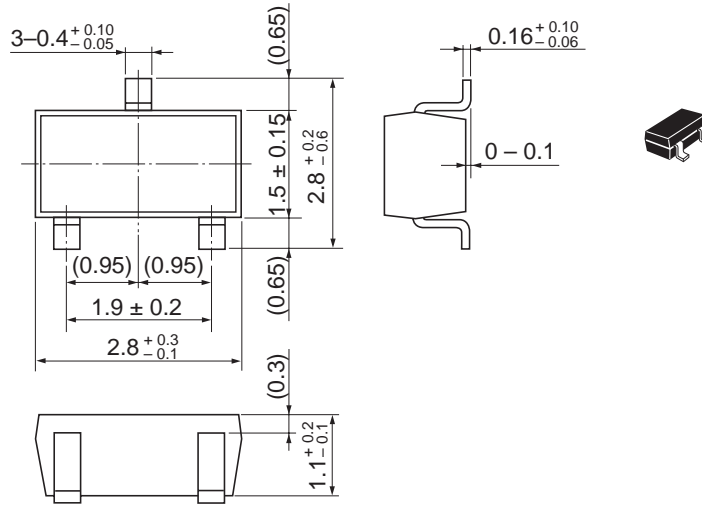


Fig.4 Forward resistance vs. Forward current

Package Dimensions

As of January, 2003
Unit: mm



| | |
|------------------------|----------|
| Package Code | MPAK |
| JEDEC | — |
| JEITA | Conforms |
| Mass (reference value) | 0.011 g |

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